

REMARKS

In accordance with the foregoing, the specification and claims 1, 9 and 17 have been amended. Claim 7, 15 and 18 has been cancelled. Claims 1-18 are pending and under consideration.

Claims 1, 9, and 17 have been amended. Claims 7, 15, and 18 have been canceled. Therefore, claims 1-6, 8-14, and 16-17 are pending.

Claims 1-18 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Pat. No. 6,164,838 (Maehara et al.).

Maehara is directed to an optical fiber module including an electric connector connected to a computer. An electrical signal fed via an electric connector drives a Laser Diode (LD) device provided in an LD module through an LD driver. The data is transferred as an optical signal to an optical fiber inserted in an opening in the LD module. In addition, a photodiode (PD) module receives an optical signal from an optical fiber (not shown) inserted in an opening in the PD module, and the optical signal is converted into electric current by a PD device (not shown), and is converted into voltage by a transformation impedance amplifier portion of an amplifier. See Maehara, column 9, line 61 - column 10, line 9.

The present invention is directed to a receptacle type optical transmitter and/or receiver module including a printed wiring board having a first segment, a second segment, and a flexible portion for connecting the first segment and the second segment. In at least one embodiment, the second segment is arranged substantially perpendicularly to the first segment and has first and second surfaces opposite to each other. The second electric circuit component is mounted on the first surface of the second segment, and the socket is mounted on the second surface of the second segment. See Specification of the Present Invention, page 7, lines 19-24 – page 8, line 1. See also Figure 2B.

The above-identified feature is recited in independent claim 1, for example, as “wherein said second segment is arranged substantially perpendicularly to said first segment and has first and second surfaces opposite to each other; and said second electric circuit component is mounted on said first surface of said second segment, and said socket is mounted on said second surface of said second segment.”

Applicants respectfully submit that claim 1, for example, is patentable over Maehara, as Maehara does not teach or suggest the feature of the present invention identified by the above-quoted language.

Although Maehara discloses an optical fiber module including a lower cover and an upper cover, the covers are not segments of a printed wiring board, as in the present invention. Assuming arguendo, however, that the covers of Maehara are segments of a printed wiring board, Applicants respectfully submit that one of the covers is not arranged substantially perpendicularly to another of the covers. As is clearly shown in FIGs. 24 and 25, the lower cover in FIG. 24 is parallel to the upper cover in FIG. 25. See also FIG. 31. That is, the lower cover in FIG. 24 is not arranged substantially perpendicularly to another of the covers.

On page 2 of the Office Action, the Examiner stated, "[A] circuit board/lead frame 30 that includes a flexible printed circuit portion 39 with first and second segments (Note that each of the first and second segments are bendable and can be made perpendicular to each other)." Applicants are uncertain where the Examiner obtained support for providing that the segments can be made perpendicular to each other. Regardless, however, Applicants respectfully submit that bendable portions that can be made perpendicular to each other are not equivalent to a second segment arranged substantially perpendicularly to a first segment.

In light of the foregoing, Applicants respectfully submit that independent claims 1 and 17 are patentable over the references. As dependent claims 2-6 and 8 depend from independent claim 1, the dependent claims are patentable over the reference for at least the reasons presented above for independent claim 1.

As independent claim 9 recites language similar to that of independent claim 1, Applicants respectfully submit that independent claim 9 is patentable over Maehara for at least the reasons presented above for independent claim 1. As dependent claims 10-14 and 16 depend from independent claim 9, the dependent claims are patentable over Maehara for at least the reasons presented above for independent claim 9.

Applicants further submit that Maehara does not teach or suggest a printed wiring board having a first non-flexible segment, a second non-flexible segment, and a flexible portion for connecting the first and second segments, as recited in the currently amended claims.

In addition, Maehara does not teach or suggest a socket mounted on the second surface of the second segment. Rather, in Maehara, as clearly shown in FIG. 16, LD module 50 and PD module 40 are directly mounted on the FPC 39 by inserting pins of the LD module 50 and PD module 40 into the through holes formed in the FPC 39.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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